

Johnson County Community College Academic Program Map for Transfer to University of Kansas School of Engineering Civil Engineering, B.S. 2023-2024 Catalog Contact: School of Engineering

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Civil engineering (CE), the oldest and broadest of the divisions of engineering, implements a range of public and private projects for improving society's physical infrastructure and the environment. The civil engineer integrates scientific principles with engineering experience to plan, design, and construct networks of highways and railroads, airports, bridges and dams, environmental pollution control systems, industrial structures, water purification and distribution systems, and urban transportation systems that maintain, protect, and enhance the quality of life. Civil engineers are trained to consider the social effects as well as the physical and environmental factors that constrain the planning, design, construction, and operation of their projects. Environmental engineering, a technical specialization with its origins in civil engineering, is a growing discipline dedicated to the protection of the environment.

- Admission to The University of Kansas is required, along with the following, for admission to the KU School of Engineering as a transfer student:
 - 1. 2.5+ cumulative college GPA
 - 2. "C" or better in MATH 125 Calculus I, or its direct equivalent (MATH 241 Calculus I* at JCCC)
 - 3. "C" or better in all math, science and engineering coursework
- Application deadline for the School of Engineering is May 1 for summer and fall: December 1 for spring.
 Visit engr.ku.edu/admission.
- Admission is selective. Meeting minimum requirements does not guarantee admission.
- Timely completion of prerequisite courses is imperative due to tight sequencing of major courses. Consult KU catalog and seek KU advising early.
- The B.S. in Civil Engineering is an ABET accredited program.
- A total of 128 credit hours is required for the B.S. in Civil Engineering. Students may identify broad
 concentrations in either general civil engineering or environmental engineering. Within these, students
 may choose elective courses to permit additional exposure to selected areas of civil or environmental
 engineering such as transportation, structural, geotechnical, environmental, and water resource
 engineering. In environmental engineering, electives may be selected to focus on water quality and
 treatment, bioremediation, solid and hazardous wastes, air quality, and air pollution control.
- Sixty-four credits may be transferred to KU from community colleges. The last 30 hours of course work must be completed at KU. A minimum of 45 upper-level hours must be completed at KU.
- Transfer students will have their applications to the School of Engineering evaluated on a case-by-case basis and must have a minimum GPA of 2.5 to be considered.
- Transfer credits must have a grade of "C" or higher to be applied toward the degree.
- Pass/Fail policy: not allowed for any courses in Civil Engineering.
- Students must take the Fundamentals of Engineering (FE) Exam prior to graduation.

It is the STUDENT'S RESPONSIBILITY to check for updates to all transfer information. This academic program map for transfer is provided as a service and is updated as needed. Degree requirements at the four-year colleges are subject to change by those institutions. To ensure you have the most accurate up to date information about the program, it is imperative you meet with an advisor at the transfer institution.

Program Requirements (General Civil Engineering and Environmental Engineering option)

KU Courses	Hrs	JCCC Courses (Note: 64 hrs may transfer from JCCC)	Hrs	KU Core
KU Core Component				
ENGL 101 Composition	3	ENGL 121 Composition I*	3	GE 2.1
ENGL 102 Critical Reading and Writing	3	ENGL 122 Composition II*	3	GE 2.1
COMS 130 Speaker-Audience Comm.	3	COMS 121 Public Speaking	3	GE 2.2
ECON 104 Introductory Economics OR	4	ECON 132 Survey of Economics OR	3	GE 3S
ECON 144 Principles of Macroeconomics OR	3	ECON 230 Principles of Macroeconomics OR	3	
ECON 142 Principles of Microeconomics	3	ECON 231 Principles of Microeconomics	3	
KU Core Goal GE 3H Arts & Humanities	3	See list for Goal GE 3H	3	GE 3H
KU Core Goal AE 4.1 Human Diversity	3	See list for Goal AE 4.1	3	AE 4.1
KU Core Goal AE 4.2 Global Awareness	3	See list for Goal AE 4.2	3	AE 4.2
Mathematics				
MATH 125 Calculus I	4	MATH 241 Calculus I*	5	GE 1.2
MATH 126 Calculus II	4	MATH 242 Calculus II*	5	N/A
MATH 127 Calculus III	4	MATH 243 Calculus III*	5	N/A
MATH 220 App. Differential Equations	3	MATH 254 Differential Equations*	4	N/A
MATH 290 Elementary Linear Algebra	2	MATH 246 Elementary Linear Algebra*	3	N/A
Basic Sciences				
PHSX 210^/ 216 General Physics I/Lab	3/1	PHYS 220 Engineering Physics I*^	5	GE 1.1
PHSX 212/ 236 General Physics II/ Lab	3/1	PHYS 221 Engineering Physics II*	5	N/A
CHEM 150 Chemistry for Engineers	5	CHEM 124/125 General Chemistry I*/Lab* AND	4/1	GE 3N
		CHEM 131/132 General Chemistry II*/Lab*	4/1	
Science Elective:				
BIOL 100 Principles of Biology	3	BIOL 121 Introductory Biology for Non-Majors	4	GE 3N
Basic Engineering Sciences				
CE 260 Statics & Dynamics	5	ENGR 251 Statics* AND	3	N/A
		ENGR 254 Dynamics*	3	
ARCE 217 Computer-Assisted Building Design	3	DRAF 129 Interpreting Architectural Drawings AND	2	N/A
		DRAF 143 Introduction to BIM Building Information	2	
		Modeling*		
Computer Programming Elective				
EECS 137 Visual Basic for Engineers^^ OR	3	CS 235 Object-Oriented Programming Using C++*	4	Major
EECS 138 Introduction to Computing	3			
Engineering Science course (3 hours) – will be	e taken a	at KU.		
General Civil Engineering or Environmental E				

^{*}JCCC course has a prerequisite or corequisite.

[^]PHSX 211 (PHYS 220 at JCCC) satisfies the PHSX 210 requirement for Engineering at KU. Please note PHSX 210 is the preferred course.

^{^^}EECS 137 is preferred; EECS 138 Web Option is not allowed.